

Water Plant Art

Objective

Students will recognize the importance of plants to an aquatic habitat.

Curricular Areas

Social Science (waterways); Science (types of water and the vegetation); Art (plant printing); Language Arts (creative writing in the extension)

California Content Standards

Science: K–Life 2, Earth 3, Investigation 4; 1st–Life 2, Investigation 4; 2nd–Life 2, Earth 3, Investigation 4

Social Science: K–1 & 4; 1st–1 & 2; 2nd–4

Language Arts: K–Written/Oral 1.0, Listening 1.0, 2.0; 1st–Writing 1.0, Written/Oral 1.0, Listening 1.0, 2.0; 2nd–Writing 1.0, Written/Oral 1.0, Listening 1.0, 2.0

Method

Students can use aquatic plants (both fresh and salt water) to create artwork showing different aquatic habitats.

Materials

- Both fresh and salt water aquatic plants (real or replica).
- Tempera paint; browns, greens and blues. Thin with water.
- Coloring utensils (crayons, markers or colored pencils)
- Paper for the coloring and painting (white or blue).
- Newspaper
- Pie tins for the thinned tempera paint

Background

Aquatic plants are a necessary part of the web of life in any aquatic habitat. They grow in a variety of sizes, shapes and colors. The benefits of aquatic plants include: releasing oxygen into the water, absorbing excess nutrients, providing food, and breaking down into detritus during decomposition. Detritus feeds many small aquatic insects, shellfish and small fish, which are eaten by larger

predators. Emergent plants, such as cattails, grow in swallow water or at the waters edge. Floating plants like water lilies are rooted underwater and their stems extend to or above the waterline. The roots and leaves of both emergent and floating plants provide food, shade, cover, and a place for aquatic animals to lay their eggs and the young to hide. Along the shorelines plants reduce erosion by stabilizing the soil. Aquatic plants also attract insects, which in turn attract insect-eating birds; birds may also use the plants for nesting. In addition, many wildlife species feed on the seeds produced by some of these plants.

Procedure

NOTES: Plants for students to study may be collected from outdoors, or purchased from pet/aquarium stores and some plant nurseries and science supply catalogs. If you plan to collect plants from the wild, be sure to follow local laws and ordinances for collecting plants. Do not dispose of purchased plants in a local ecosystem! Place them in plastic bags, freeze them, then place them in the trash. For plant prints, plastic or silk aquarium plants work well. Additional adult help would be beneficial.

1. Discuss with students plants they may have seen growing in or near a river, pond or the ocean. Let them share their experiences.
NOTE: For ESL and ELL students, pictures of aquatic habitat and different types of aquatic plants are important.
2. Show students a picture of a fresh water habitat (a lake, stream, river, and pond). Review that this is a fresh water habitat. If you have fresh water plants, allow students to see, touch and smell the plants. Show a picture of the ocean, explaining that this is a salt water habitat. If you have salt water plants, allow the students to touch, see and smell the plants.
3. Share with the students the role plants play in the aquatic habitat. Use the information in the background section.
4. Explain that each student will use an aquatic plant (or plant replica) to create artwork. Discuss the plant's habitat (fresh water and salt water).

Continued

5. Model for the students how the artwork will be created. Place plant in the thinned tempera paint and then press onto paper.
6. Help the students cover their tables or desk with newspaper and pass out paint and supplies.
NOTE: It may be easier to have the students sitting in groups so that each group can share paint and other supplies.
7. Encourage students to arrange plant prints in the way plants might grow. Assist students that need help making the print. When students finish their plant prints have them draw and color an aquatic environment around their plant.
8. After students have finished their art have them share whether they have created a fresh water or salt water habitat. Have them explain how plants help the habitat sustain life.

Extensions

1. Have the students tell or write a creative story about their picture including the animals and the life that lives in their picture.
2. Talk about local water habitats and the life that they sustain (visit one of those sites).
3. Draw a picture of a pond or seashore area as it would look in the spring, summer, fall and winter.

Evaluation

- Have the students talk about the habitat they made and what is needed for life to flourish.
- Have students explain why plants are important in the aquatic habitat.

Notes
